AMENDMENTS TO THE CLAIMS

Please cancel claims 21 - 47, and amend claims 1, 5, 6, 13, 14, 19 and 20, and add new claims 48 - 57, as follows:

1. (currently amended) A method of manufacturing a semiconductor device comprising:

connecting at least part of a path extending from a reaction chamber to a detoxification device through a vacuum pump by a flexible tube having a tube body made of hard material, the tube body having projected parts and depressed parts and a cover provided over an outer surface of the tube body, the cover being made of elastic material, the cover being in contact with around the projected parts of the tube body and formed over the depressed parts of the tube body so that a vacant space is formed between the tube body and the ~~cover;~~ cover, wherein the cover is made of a material selected from the group consisting of heat shrinkable silicone rubber and electron beam bridging soft flame resistance polyolefin resin;

disposing a semiconductor substrate within the reaction chamber;

activating the vacuum pump to bring the reaction chamber into a pressure reduced state;

supplying a reaction gas to the reaction chamber; and

causing the reaction gas to react to thereby deposit a reactant on the semiconductor substrate.

2. (original) A method of manufacturing a semiconductor device according to claim 1, wherein a thickness of the tube body is about 1-2mm and a thickness of the cover is about 0.15-0.3mm.

3. (original) A method of manufacturing a semiconductor device according to claim 1, wherein the cover is made of heat shrinkable silicone rubber.

4. (original) A method of manufacturing a semiconductor device according to claim 1, wherein the cover is made of electron beam bridging soft flame resistance polyolefin resin.

5. (currently amended) A method of manufacturing a semiconductor device according to claim 1, wherein the cover is cylindrically shaped ~~to be cylinder~~ to have an inner surface which is in contact with the projected parts of the tube body but not with the depressed parts.

6. (currently amended) A method of manufacturing a semiconductor device according to claim 1, wherein the cover is formed by:

providing the cover in a cylindrical shape ~~of the cover~~;

inserting the tube body into the cover; and

heating the cover in order ~~that~~ to shrink the cover ~~is shrink~~ and to be in contact with a part of the outer surface of the tube body.

7. (original) A method of manufacturing a semiconductor device comprising:

connecting at least part of a path extending from a processing chamber to a detoxification device through a vacuum pump by a flexible tube having a tube body made of hard material, the tube body having projected parts and depressed parts and a cover provided over an outer surface of the tube body, the cover being made of elastic material, the cover being in contact with around the projected parts of the tube body and formed over the depressed parts of the tube body so that a vacant space is formed between the tube body and the cover;

disposing a semiconductor substrate within the processing chamber;

activating the vacuum pump to bring the processing chamber into a pressure-reduced state;

supplying a processing gas to the processing chamber; and

causing the processing gas to react with a substance on the semiconductor substrate to thereby effect a process on the semiconductor substrate.

8. (original) A method of manufacturing a semiconductor device according to claim 7, wherein the process effected on the semiconductor substrate is an etching process.

9. (original) A method of manufacturing a semiconductor device according to claim 7, wherein the process effected on the semiconductor substrate is an ashing process.

10. (original) A method of manufacturing a semiconductor device according to claim 7, wherein a thickness of the tube body is about 1-2 mm and a thickness of the cover is about 0.15-0.3 mm.

11. (original) A method of manufacturing a semiconductor device according to claim 7, wherein the cover is made of heat shrinkable silicone rubber.

12. (original) A method of manufacturing a semiconductor device according to claim 7, wherein the cover is made of electron beam bridging soft flame resistance

polyolefin resin.

13. (currently amended) A method of manufacturing a semiconductor device according to claim 7, wherein the cover is cylindrically shaped ~~to be cylinder~~ to have an inner surface which is in contact with the projected parts of the tube body but not with the depressed parts.

14. (currently amended) A method of manufacturing a semiconductor device according to claim 7, wherein the cover is formed by:

providing the cover in a cylindrical shape ~~of the cover~~;

inserting the tube body into the cover; and

heating the cover in order ~~that~~ to shrink the cover ~~is shrink~~ and to be in contact with a part of the outer surface of the tube body.

15. (original) A method of manufacturing a semiconductor device comprising:

connecting at least part of a path extending from a processing chamber provided with a target to a detoxification device through a vacuum pump by a flexible tube having a tube body made of hard material, the tube body having projected parts

and depressed parts and a cover provided over an outer surface of the tube body, the cover being made of elastic material, the cover being in contact with around the projected parts of the tube body and formed over the depressed parts of the tube body so that a vacant space is formed between the tube body and the cover;

disposing a semiconductor substrate within the processing chamber;

activating the vacuum pump to bring the processing chamber into a pressure-reduced state;

supplying a sputtering gas to the processing chamber; and

causing ions of the sputtering gas to collide with the target to thereby deposit a material constituting the target on the semiconductor substrate.

16. (original) A method of manufacturing a semiconductor device according to claim 15, wherein a thickness of the tube body is about 1-2 mm and a thickness of the cover is about 0.15-0.3 mm.

17. (original) A method of manufacturing a semiconductor device according to claim 15, wherein the cover is made of heat shrinkable silicone rubber.

18. (original) A method of manufacturing a semiconductor device according to claim 15, wherein the cover is made of electron beam bridging soft flame resistance polyolefin resin

19. (currently amended) A method of manufacturing a semiconductor device according to claim 15, wherein the cover is cylindrically shaped ~~to be cylinder~~ to have an inner surface which is in contact with the projected parts of the tube body but not with the depressed parts.

20. (currently amended) A method of manufacturing a semiconductor device according to claim 15, wherein the cover is formed by:

providing the cover in a cylindrical shape ~~of the cover;~~

inserting the tube body into the cover; and

heating the cover in order ~~that~~ to shrink the cover ~~is shrink~~ and to be in contact with a part of the outer surface of the tube body.

Claims 21 - 47 (Canceled)

48. (new) A method of manufacturing a semiconductor device comprising:

connecting at least part of a path extending from a reaction chamber to a detoxification device through a vacuum pump by a flexible tube having a tube body made of hard material, the tube body having projected parts and depressed parts and a cover provided over an outer surface of the tube body, the cover being made of elastic material, wherein the cover is shaped to be in contact with the surface of the tube body around the projected parts thereof and not to be in contact with the surface of the tube body around at least part of the depressed parts thereof so that a vacant space is formed between the tube body and the cover;

disposing a semiconductor substrate within the reaction chamber;

activating the vacuum pump to bring the reaction chamber into a pressure-reduced state;

supplying a reaction gas to the reaction chamber; and

causing the reaction gas to react to thereby deposit a reactant on the semiconductor substrate.

49. (new) A method of manufacturing a semiconductor device according to claim 48, wherein a thickness of the tube body is about 1-2mm and a thickness of the cover is about 0.15-0.3mm.

50. (new) A method of manufacturing a semiconductor device according to claim

48, wherein the cover is made of heat shrinkable silicone rubber.

51. (new) A method of manufacturing a semiconductor device according to claim 48, wherein the cover is made of electron beam bridging soft flame resistance polyolefin resin.

52. (new) A method of manufacturing a semiconductor device according to claim 48, wherein the cover is cylindrically shaped to have an inner surface which is in contact with the projected parts of the tube body but not with the depressed parts.

53. (new) A method of manufacturing a semiconductor device according to claim 48, wherein the cover is formed by:

providing the cover with a cylindrical shape;

inserting the tube body into the cover; and

heating the cover in order to shrink the cover and to be in contact with a part of the outer surface of the tube body.

54. (new) A method of manufacturing a semiconductor device comprising:

connecting at least part of a path extending from a reaction chamber to a detoxification device through a vacuum pump by a flexible tube having a tube body made of hard material, the tube body having projected parts and depressed parts and a cover provided over an outer surface of the tube body, the cover being made of elastic material and being

formed by filling silicon over the whole outer surface of the tube body, wherein the cover is provided with V-shape slits at the depressed parts of the tube body, and wherein the tube body has a thickness of about 1-2 mm and the cover has a thickness of about 0.15-0.3 mm;

disposing a semiconductor substrate within the reaction chamber;

activating the vacuum pump to bring the reaction chamber into a pressure-reduced state;

supplying a reaction gas to the reaction chamber; and

causing the reaction gas to react to thereby deposit a reactant on the semiconductor substrate.

55. (new) A method of manufacturing a semiconductor device according to claim 54, wherein the cover is made of heat shrinkable silicone rubber.

56. (new) A method of manufacturing a semiconductor device according to claim 54, wherein the cover is made of electron beam bridging soft flame resistance polyolefin resin.

57. (new) A method of manufacturing a semiconductor device according to claim 54, wherein the V-shape slits do not reach the outer surface of the tube body.